INVESTIGATION OF SPORTS HIGH SCHOOL STUDENTS COPING WITH STRESS LEVELS
Konya Province Case

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ABSTRACT

This study, aims to examine the different variables in how the students in sports high school copes with stress. In this study, screening method has been used and 242 questionnaires were distributed to the participants by the number of students. Out of 204, 201 has been returned. Some of these questionnaires has been without valid reasons, such as incomplete questionnaires are set to leave. In total, 188 of the questionnaires has been found worthy of analysis. Accordingly, 188 participant’s information (% 68.6 Male, n=129, %31.4 Female, n=59) was taken into account. Data of this research has been developed by Personal Information Form and Folkman and Lazarus (1980), which was adopted to Turkish by Şahin ve Durak (1995) under the name of Stress Coping Styles Participant’s ways to cope with stress has been analyzed depending on their gender, age, income and sportive activities.

In this research, a significant difference has been found between coping with stress and gender difference. Female participant’s ways of coping with stress has been found rather weaker, then to those of male participants. In contrast, there is no significant difference that is observed between income, physical fitness and age, in terms of coping with stress.

Administration board of the school, teachers and the parents of the female students may contribute by education and planning, to female participant’s ways of coping with stress.

Key Words: Stress, Coping with Stress, Sports High School Students.
INTRODUCTION

In today’s way of life, stress is one of the most important effects on a person’s life. While it can be bothering, annoying and may cause very serious problems, it may also motivate the person. There is no popular opinion of the origination of the word “Stress”. According to some sources, it originated from the Latin word “Stringer”. According to Oliver and Ventor (2003), the word, “Stress” has originated from the word “Strictus” and it means rigid body position (Bashir and Friends., 2013, 189). According to Yalçın, Çalık and Ramazanoğlu (2016), stress is the status of a person’s being under physical or mental pressure (Yalçın, Çalık ve Ramazanoğlu, 2016, 939). In the most common sense, stress is the reaction that is shown by the person to the problems. In other words, stress is the status of while meeting the persons needs from surrounding area and creating tension either in its ranks or personality, when its extremely strong, causing the adaptation to falter, causing person’s to change his/her identity and devastation (Bakırcıoğlu, 2006, 237). In fact, the fundamental of stress is the sense of destruction. In the face of an attack from outside, it is the status of a reaction against extinction. Extinction in this case, has two meanings. First is the literal end of the person’s existence while the second meaning is to lose the person’s honor, job, health or economical assets (Öner, 1986, 15). According to Lazarus and Folkman (1998) whom are the most known and respected researchers, stress is the status of facing the excitement of recourses of the person and seeing it as a stimulant (Anadolu Üniversitesi Yayınları, 1999, 2). In a situation like this, organism has an ability to move the self-defense in order to protect itself. It fights against the current enemy, and in case it cannot be victorious, it reacts as steering away from it and thus adapting to current situation(Baltaş ve Baltaş, 2000, 23). According to U.S. Department of Health and Human Service (1999) stress, is an open risk to mental health and effects a single child out of 5 between the ages of 9-17. Since youth, is a period of development, it is especially defenseless against the effects of stress (Suldo, Shaunessy and Hardesty, 2008, 273).

Other than the personal effect on Socio-physical and Socio-psychological, stress can be harmful to the being. Researches show that extreme stress can effect the students academical performances, to their well being as well as their physicomotor functions. It also has certain effects the health and may lead to alcholoism, drug addiction, eating disorder, sleeping disorder, suicide, mental and psyological issues (Labrague, 2013, 425). It is known
that certain common reasons of stress, such as parental or family issues, issues within school with friends or teacher, may start as normal problems yet may lead into psychological and biological problems (Reddy, Kannekanti and Hamza, 2015, 19).

In coping with stress and managing it first step is to know its symptoms and to understand them. Physical symptoms of stress include, head ache, irreguler sleep, muscle ache, sweating, back pain, being tired and loss of energy. Emotional symptoms of stress include, being tense, worrisome, fear, irritability, change of the emotional situation is a fast and constant way. Mental symptoms of stress include, difficulties while concentrating, difficulties while deciding, forgetfulness, confusion, low efficiency and rise in errors. Social symptoms of stress include, trust issues, blaming others, being extremely defensive (Braham, 1998, 53-55; Translate by Diker). In the beginning of the stress duration, mind and body would try to do its best. While being under extreme stress can lower these, it is also natural and necessary for human and animals to react to this (Barlow, Rapee and Perini, 2014, 1). At this point, if schools were to show how to cope with stress in order to raise the student’s efforts, they can point out the positive effects of stress on education. While extreme amount of stress may prevent the motivations and studies, positive stress can make students reach their peaks (Pfeiffer, 2001, 6). For an example, professions such as deep diving and mountain climbing are under constant stress, yet people who has these professions can control their stress and thus have a positive effect (Keenan, 1999, Translated by Aydın). Unlike the common belief, stress is not always something bad, in fact it is an effective motivator. On a daily basis it is used to handle basic situations. However, stress has abilities such as increasing motivation, increase of performance (Clinic Community Health Service, 2014, 4). For an example, athletes in the Olympics do not break the records on their casual trainings or their shows, yet whenever they are in front of the crowd, they get motivated to do so. In this context, stress is a combination of the symbols for danger and opportunity in Chinese. Under stress, we have the capability to use our energy either to build things or to destroy them (Rowsshan, 2003, 12; Translated by Cüceoğlu).

The aim of this study is to investigate the level of high school students cope with stress by several variables. The main goal of this research is, the effect of physical activities on coping with stress and answering to these questions.
1. Do the students show significant differences according to their age while coping with stress?
2. Do the students show significant differences according to their income level while coping with stress?
3. Do the students show significant differences according to their physical activity level while coping with stress?
4. Do the students show significant differences according to their gender while coping with stress?

MATERIAL AND METHOD

Model of Research

This research is a descriptive survey study. Survey study is a type of examination, where within a certain amount of time, to determine the real situation in terms of cases subjects, a research based upon the examples of the society (Arseven, 1993, 14).

Study Group

Example of the study group is formed by the students of Sports High school of Konya, in the province of Konya/Selçuklu, which is attached to National Education Ministry.

Information Gathering Equipment

Within this study, participants have been given the form that is prepared by the researcher that is based upon the Scale of Ways to Cope with Stress.
**Scale of Ways to Cope with Stress:** Ways of Coping Inventory of Folkman and Lazarus (1980) have been adapted to university students by Şahin and Durak (1995) in Turkey as a reliability test (Folkman and Lazarus, 1980, Şahin and Durak, 1995). In its original state, the scale has 66 rules yet due to utilization of certain physico-metric methods, it has been reduced to 30 rules and has been named Scale of Ways to Cope with Stress (SBTÖ in Turkish). In this scale participants are asked how appropriate the methods are. It is in the form of 4 optional Likert format of “Not At all” to “ Completely Agreeable” (Poyraz, 2009, 57). Within SBTÖ, there are 5 inferior scale as, “Secure Self Approach”, “Insecure Approach”, “Submissive Approach”, “Positive Approach”, “Application to Social Support”. The coefficient reliability point is between 0.45 to 0.80, the main coefficient reliability point is established as 0.68 (İmamoğlu, 2009, 78, 86).

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
<th>Physical Activity</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>129</td>
<td>68,6</td>
<td>Yes</td>
<td>181</td>
<td>96,3</td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>31,4</td>
<td>No</td>
<td>7</td>
<td>3,7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>%</th>
<th>Income</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>5</td>
<td>2,7</td>
<td>Low</td>
<td>14</td>
<td>7,4</td>
</tr>
<tr>
<td>15</td>
<td>66</td>
<td>35,1</td>
<td>Average</td>
<td>97</td>
<td>51,6</td>
</tr>
<tr>
<td>16</td>
<td>65</td>
<td>34,6</td>
<td>Good</td>
<td>72</td>
<td>38,3</td>
</tr>
<tr>
<td>17</td>
<td>48</td>
<td>25,5</td>
<td>Very Well</td>
<td>5</td>
<td>2,7</td>
</tr>
<tr>
<td>18 or Above</td>
<td>4</td>
<td>2,1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Personal Identification Form:** It has been prepared in order to receive the information of the students. It includes 4 questions to receive the knowledge of age, gender, income, whether they take parts in physical activities.
Analysis of the Data

Scale has been prepared after the students have provided the information voluntarily to the researcher. 20.00 Statically information has been transferred to SPSS (Statistic for Social Sciences) the analysis has been completed.

FINDINGS

Demographical statistics are to be found in: Chart 1, findings can be found in Chart 2, Chart 3, Chart 4, and Chart 5.

<table>
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<th>%</th>
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<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>5</td>
<td>2.7</td>
<td>Low</td>
<td>14</td>
<td>7.4</td>
</tr>
<tr>
<td>15</td>
<td>66</td>
<td>35.1</td>
<td>Average</td>
<td>97</td>
<td>51.6</td>
</tr>
<tr>
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<td>65</td>
<td>34.6</td>
<td>Good</td>
<td>72</td>
<td>38.3</td>
</tr>
<tr>
<td>17</td>
<td>48</td>
<td>25.5</td>
<td>Very Well</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>18 or Above</td>
<td>4</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart 1: Demographical Information of Participants

In the analysis of first chart, it is visible %68.6 of the participants are male and the rest 31.4 are female. %95.2 of the participants are between the age of 15 to 17, %89.9 of the participants have an average or well income and %96.3 of the participants take part in physical activities.

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Chart 2: Results of the Mann-Whitney U Test on Coping with Stress between Gender Differences in Sports High School Students

<table>
<thead>
<tr>
<th>Variant</th>
<th>Groups</th>
<th>n</th>
<th>Average Rank</th>
<th>Total Order</th>
<th>U</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coping with Stress</td>
<td>Female</td>
<td>59</td>
<td>82.04</td>
<td>4840.50</td>
<td>3070.50</td>
<td>-2.124</td>
<td>0.034*</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>129</td>
<td>100.20</td>
<td>12925.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05

In Chart 2, it is visible that there is a significant difference between genders on their levels of coping with stress, and in the average rank it can be seen that its in favor of male students. In sports high school, male students have a higher level of coping with stress.

Chart 3: Results of the Mann-Whitney U Test on Coping with Stress between Age Differences in Sports High School Students

<table>
<thead>
<tr>
<th>Variant</th>
<th>Groups</th>
<th>n</th>
<th>Avarage Rank</th>
<th>Sd</th>
<th>X²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coping with Stress</td>
<td>14</td>
<td>5</td>
<td>98</td>
<td>4</td>
<td>1.463</td>
<td>0.833</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>66</td>
<td>96.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>65</td>
<td>93.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>48</td>
<td>90.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 18 years old</td>
<td>4</td>
<td>123.13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p>0.05

In chart 3, it is observed that sport high school students stress coping style and age variable have no statistical meaningful difference. In other words, coping with stress style and age have no meaningful relation to each other.
Chart 4. Results of the Mann-Whitney U Test on Coping with Stress between Family level of income Differences in Sports High School Students

<table>
<thead>
<tr>
<th>Variant</th>
<th>Groups</th>
<th>n</th>
<th>Average Rank</th>
<th>Sd</th>
<th>X²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>14</td>
<td>103.71</td>
<td>3</td>
<td>0.940</td>
<td>0.816</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>97</td>
<td>96.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>72</td>
<td>91.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding</td>
<td>5</td>
<td>84.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p>0.05

In chart 4, it is observed that sport high school students stress coping style and their family income have have no meaningful difference. In other words, coping with stress style and family income have no meaningful relation to each other.

Chart 5. Results of the Mann-Whitney U Test on Coping with Stress between in terms of Physical Activities in Sports High School Students

<table>
<thead>
<tr>
<th>Variant</th>
<th>Groups</th>
<th>n</th>
<th>Average Rank</th>
<th>Total Order</th>
<th>U</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coping with Stress</td>
<td>Do exercise</td>
<td>178</td>
<td>93.08</td>
<td>16568.50</td>
<td>608.500</td>
<td>-0.104</td>
<td>0.917</td>
</tr>
<tr>
<td></td>
<td>Do not exercise</td>
<td>7</td>
<td>90.93</td>
<td>636.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p>0.05

In chart 5, it is observed that sport high school students stress coping style and their exercising levels have no meaningful difference. Exercising and coping with stress have no meaningful relation to each other.
DISCUSSION AND CONCLUSION

Purpose of this research is to evaluate how the students of Konya Sports High School cope with stress depending on their age, income and physical activities. The findings we have, can be supported and some could not in this branch.

In the research it is seen that female students have a less ranking of coping with stress, In this branch, we also have other inquires that supports our research. According to a research by Poyraz (2009) on teachers, male teachers have been found to have more positive attitudes towards a solution and have less pessimism. In another research on university students, studies have shown that female athletes have more worries as well as more stressed. The cause of this is that woman tendency to live stress in a more intense way while men have more experience on this topic (Baştuğ ve Çumralığıl, 2004, 99). So far the stress level of woman can be observed to be higher then man. In a similar research in capital of Nigeria, Abuja, female students have had a higher level of stress then male students, the reason of this is shown that female students tend to be more emotional (Akande, Olowonirejuoare and Okwarekalu, 2014, 35). Again, in another study that takes part in a university yet different departments, researches (Stenberger and Friends, 1993) and Ronald (1993) have shown that female students are more stressed then man (Kumar and Bhukar, 2013, 7). On this topic, studies of Vijaya and Karunakaran’s (2013) and Khan’s friends (2015), have shown that in India between the age of 14 to 18 the studies have similar results (Khan, Lanin and Ahmad, 2015, 167). In Jordan, on an research to determine the stress level of university students, it has been seen that female students has had a higher stress level then men, to explain this, it has been said that female students are still under pressure by culture and social taboos (Thawabieh and Qaisy, 2012, 116). However there are also researches that show the other wise. For an example, in a study conducted by Mondal and friends (2011) it was seen that there are differences between physical stress and physiological stress among male and female teachers. It has been concluded as male teachers are less secure and have more economical worries, as well as a higher level of anxiety and stress then female teachers (Okeke friends, 2014, 144). Among some of the researches the hypothesis of a significant difference between male and female has been declined. Chan (2002), Lo (2002), Woloschuk vd (1998)’s works are an example of this (Durna, 2006, 339). Same evidence has been found in university students by Üstün and Bayar (2015), in school teachers by Aksu (1999), among highschool students who
has physical activities by Tural (1994) and Temiz (2008)’s works on gym class teachers. (Nabizade, 2004, 39; Turkay and Sökmen, 2014, 8; Üstün ve Bayar, 2015, 387). In a similar research in a highschool on the western part of Ghana, there was a study on the connection between stress level and academic performance. On gender difference, there hasnt been a significant difference (Emmanuel, Adom and Solomon, 2014, 94). On this study there hasnt been an effect of age difference. On the topic, it is possible to see different results. On the study of province of Afyonkarahisar, in its 14 districts, 252 primary school head masters’ way of coping with stress, it is seen that as age grows older, the active coping style has been more visible. This connection has similirities with the work of Petrosky and Birkimer (1991), (İmamoğlu, 2009, 134). In Çumralıgil’s high school male and female athletes has had a higher level of stress than of those of a university male or female student. Another research in Turkey shows that 177 female administrator in the universities of Turkey, has a high level of stress. In the same manner Winefield and Jarett (2001) has found that younger academical personal has a higher level of stress then of those with experience (Akın, Baloğlu ve Karshi, 2014). It is also possible to find data that does not get along with it. In a university in Taiwan on a study on the causes of stress, it is seen that experienced students have had a higher pressure of physical, mental, emotional and school factored effects (Kahi-When, 2009, 6). On the study of Altinkol (2011), there hasnt been found a relevency on the age and stress. In another study, it is seen that students in wrestling education center, does not have a higher level of stress depending on their age (Şeker, 2014, 51). Therefore, this research supports the findings of this study.

In this research there hasn’t been a relevancy on the income of the students and their ways to cope with stress. Studies made by Ören and Türkoğlu (2006); Pehlivan (2008); Yöndem and Biçak (2008) and Sözen and friends (2012) supports our findings. On the other hand, studies conducted by Temel and friends (200); Camilla (1991) Akt: Avşaroğlu (2007); Otacığlı (2008); Dost (2007); Gündoğar and friends (2007); Sarıtaş (2009) oppose the findings (Akpinar, 20013, 237). Further, Kurt’s study (2011) on Police Training School’s students, Özdel’s study (2002) on university students and Şenols study on the students whom were brought to Erciyes Medical Faculty, due to committing suicide, have been opposing the findings (Kurt, 2011, 83).

Finally, there hasn’t been a difference of coping with stress among the physical active students and those that are not. On the topic there are relevant researches. On the students that
are physically active and of those whom are not, there is a significant gap. Those that are physically active has less stress (Arslan and Friends, 2011, 124). In the same manner, satisfaction of athletes and their level of stress as well as their aggressiveness do have a negative connection. According to this study, the higher the satisfaction, the less stressful and aggressive the person will be (Özdevecioğlu and Yalçın, 2010, 73). So, according to Duman and Kuru (2010), sportive activities remove the physiological and social dangers and creates a dynamic way of life which creates a solution (Ekinci and Friends, 2014, 37).

In the studies among the teenagers whom are physically active and those that are not, there hasn’t been a relevancy. In this case it can be said that athlete student has already overcame the stress that could be created for his/her training or matches(Duman,2009,41). On the study of the aggressiveness and stress levels of the students in the high school, there hasn’t been a statistical relevancy. Being physically active can help the psychological comfort. In the studies done by Salar and others (2012; Peluso and Andrade (2005), it is seen that taking part in physical activities can help with coping with stress because it lowers its increase rate (Uluışık, 2015, 58).

**Suggestions due to evidence:**

1. Administration members, teachers, parents of the students should take part in psychological advice coordination of how to cope with stress in order to effect the female students in a positive way and thus create events to motivate them.

2. There should be physical exercises on a singular person basis.

3. Parents of the students should be educated on the effects of environmental-based stress causes.
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